

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

1. (original) A mobile device (104) capable of supporting packet data services and voice services offered by wireless networks, the mobile device comprising:
 - a transceiver for exchanging packet data service authentication information with the wireless networks;
 - a memory;
 - a packet data services (122) blacklist provided in the memory, the packet data services blacklist identifying wireless networks that do not provide packet data services to the mobile device, the packet data services blacklist being based on previous packet data service authentication rejections and being distinct from a voice services blacklist; and
 - a processor for updating the packet data services blacklist in response to newly received packet data service authentication information.
2. (original) The mobile device of claim 1 wherein the packet data services blacklist includes an element selected from the group consisting of: a system identifier and network identifier (132) for each wireless network not providing packet data services to the mobile device; a timer value (134) for each wireless network not providing packet data services to the mobile device; an age timer for each wireless network not providing packet data services to the mobile device; and a flag (136) indicating whether an identification of a blacklisted wireless network has been passed to a server.
3. (original) The mobile device of claim 1 wherein the packet data services blacklist includes a composite packet data services blacklist received from a server.
4. (original) A method of data service discovery for a mobile device (104) having a packet data services (122) blacklist comprising:
 - detecting a wireless network;

examining the packet data services blacklist stored on the mobile device, the packet data services blacklist being distinct from a voice services blacklist;

if the detected wireless network is listed in the packet data services blacklist, refraining from making any packet data call attempts for a predetermined period of time; and

otherwise, determining whether the wireless network provides packet data services to the mobile device, and adding the wireless network to the packet data services blacklist if the wireless network does not provide packet data services to the mobile device.

5. (currently amended) The method of claim 4 further comprising, prior to the step of checking examining the packet data services blacklist, the step of determining whether the wireless network supports data service.

6. (original) The method of claim 4 wherein the step of determining whether the wireless network provides packet data services to the mobile device comprises the step of authenticating the mobile device on the wireless network.

7. (original) The method of claim 4 further comprising a step selected from the group consisting of: starting an age timer associated with a wireless network that is added to the packet data services blacklist; clearing an age timer associated with a wireless network in response to satisfaction of a reset condition; notifying a server of a newly blacklisted wireless network; and receiving a composite packet data services blacklist from a server.

8. (original) The method of claim 4 further comprising the step of clearing the packet data services blacklist in response to a provisioning reset condition.

9. (currently amended) The method of claim 4 further comprising a step selected from the group consisting of: sending a notification to the a server if a mobile device finds a wireless network which was not previously providing packet data services to the mobile device and is now providing packet data services to the mobile device; and sending a notification from the server to other mobile devices to clear the entry of a wireless network which was previously not providing packet data services but currently is providing packet data services.

10. (original) A method of packet data service notification in a wireless network, the wireless network including a server (128) and a mobile device (104), the method comprising:

- receiving at the server a registration of a newly powered-up mobile device;
- retrieving a server-stored packet data services (122) blacklist identifying wireless networks that do not provide packet data services to the newly powered-up mobile device, the server-stored packet data services blacklist being distinct from a voice services blacklist; and
- sending the server-stored packet data services blacklist from the server to the newly powered-up mobile device for reception by and storage on the mobile device.